

Customer Controlled Design of a Communication System

ABSTRACT

5 A system for designing a communication link for use in a data processing system, includes a parameter generator and an internal link model. The parameter generator allows a user to specify a first set of link parameters. The generator derives a set of internal parameters from the first set of parameters. The internal link model, which includes a set of configurable link cells, receives the internal parameters and instantiates each link cell based on the internal
10 10 parameters. The system further includes a channel simulator or similar means for modeling a bit error rate (BER) of the instantiated communication link and may further include an estimator of the link's area and power consumption. In an embodiment that protects the intellectual property associated with the internal model from the system user, the parameter generator prevents the user from directly accessing the internal parameters and the generic link model.